HDP/SB/21 based on PTO/SB/21 (08-00) type a plus sign (+) inside this box -> [+] **Application Number** 10/788,460 TRANSMITTAL Filing Date March 1, 2004 **FORM** Yigal BEJERANO et al. Inventor(s) (to be used for all correspondence after initial filing) Group Art Unit 2661 **Examiner Name** Unknown Attorney Docket Number 29250-000999/US ENCLOSURES (check all that apply) Assignment Papers After Allowance Communication to Fee Transmittal Form (for an Application) Group LETTER SUBMITTING APPEAL Letter to the Official Draftsperson and Fee Attached BRIEF AND APPEAL BRIEF (w/clean \_ Sheets of Formal Drawing(s) version of pending claims) Appeal Communication to Group Amendment Licensing-related Papers (Notice of Appeal, Brief, Reply Brief) Petition After Final Proprietary Information Petition to Convert to a Affidavits/declaration(s) Status Letter Provisional Application Power of Attorney, Revocation Other Enclosure(s) Extension of Time Request Change of Correspondence Address (please identify below): Terminal Disclaimer Express Abandonment Request Request for Refund Information Disclosure Statement CD, Number of CD(s) Certified Copy of Priority Remarks Document(s) Response to Missing Parts/ Incomplete Application Response to Missing Parts under 37 CFR 1.52 or 1.53 SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT Firm Reg. No. Attorney Name Harness, Dickey & Pieres, P.L.C. John E. Curtin 37,602 Individual name Signature Date June \$5, 2004



#### UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:

10/788,460

Filing Date:

March 1, 2004

Applicant:

Yigal BEJERANO et al.

Group Art Unit:

2661

Examiner:

Unknown

Title:

**METHODS DEVICES PROVIDING** AND FOR RELATIVE LEVEL OF **FAIRNESS** OoS AND **GUARANTEES** 

TO WIRELESS LOCAL AREA

**NETWORKS** 

Attorney Docket:

29250-000999/US

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 June 15, 2004

### INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98, Applicant hereby submits an Information Disclosure Statement for consideration by the Examiner.

#### I. LIST OF PATENTS, PUBLICATIONS, AND OTHER INFORMATION

The patents, publications and other information submitted for consideration by the Office (except unpublished U.S. patent applications) are listed on Form 1449 attached hereto.

#### Π. **COPIES**

A. Submitted herewith is a legible copy of (i) each U.S. patent application publication
and U.S. and foreign patent; (ii) each publication or that portion which caused it to be
listed; (iii) for each cited pending U.S. application, the application specification including
the claims, and any drawing of the application which caused it to be listed including the
claims directed to that portion; and (iv) all other information or that portion which caused
it to be listed.

B. Any patents, publications or other information which are listed on Form 1449 or on the copies of PTO-892, but which are not enclosed herewith, were previously cited by or submitted to the PTO in one of the following applications which has been relied upon for an earlier filing date under 35 U.S.C. § 120:

## U.S. Serial Number

# U.S. Filing Date

	C. Because the present application the U.S. patents or U.S. patent approximately are enclosed pursuant to patent documents or non-patent literal herewith.	lication publications which as the waiver of 37 C.F.R. § 1.9	re listed on the attached 98(a)(2)(i). Any foreign
	D. This is a PCT application in the copy of the International Search Redocuments listed on the International for consideration by the Examine application. Since the International authorities, copies of these reference trilateral agreement and are believe (MPEP 1893.03(g))	port is attached for the Examel Search Report are listed on an and for listing on any pate Search Report was from the esshould have been supplied	iner's information. The the attached Form-1449 tent resulting from this US, EPO, or JPO search to the USPTO under the
III.	CONCISE EXPLANATION OF TH	<u>IE RELEVANCE</u> (check <u>at le</u>	ast one box)
	A.  Except as may be indicated information are in the English langu		
	B. A concise explanation of information listed that is not in the 1.98(a)(3)):		
	<ol> <li>See the attached fore foreign application:</li> <li>English translations are</li> <li>Other:</li> </ol>	ign patent office communica	tion from a counterpart
	C. The following additional info	rmation is provided for the Ex	aminer's consideration.
IV.	CROSS REFERENCE TO RELATI	ED APPLICATION(S)	
	A. The Examiner is advised the subject matter that may be related application(s) to the Examiner's confidentiality provisions of 35 U.S.	to the present application. attention, Applicant(s) do	By bringing this(these)
	Serial No.	Filing Date	Art Unit
	10/788,458	March 1, 2004	2661

### V. THIS IDS IS BEING FILED UNDER

A. 🛛	37 C.F.R. § 1.97(b): (check <u>only</u> one box)
	1. within three months of the filing date of a national application other than a continued prosecution application under § 1.53(d) (37 C.F.R. § 1.97(b)(1)). No fee or certification is required.
	2. within three months of the date of entry of the national stage as set forth in §1.491 in an international application (37 C.F.R. § 1.97(b)(2)). No fee or certification is required.
	3. before the mailing of a first Office Action on the merits (37 C.F.R. § 1.97(b)(3)). No fee or certification is required. In the event that a first Office Action on the merits has been issued, please consider this IDS under 37 C.F.R. § 1.97(c) and see the certification under 37 C.F.R. § 1.97(e) below; or, if no certification has been made, charge our deposit account a fee in the amount of \$180.00 as required by 37 C.F.R. § 1.17(p).
	4.  before the mailing of a first Office Action after the filing of a request for continued examination under 37 C.F.R. § 1.114. No fee or certification is required.
в. 🔲 3	37 C.F.R. § 1.97(c): (check <u>only</u> one box)
	before the mailing date of either any Final Office Action under 37 C.F.R. § 1.113, a Notice of Allowance under 37 C.F.R. § 1.311, or an action that otherwise closes prosecution.
	1. No certification; therefore, a fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p).
	2. See the certification below. No fee is required.
C. 🗌	37 C.F.R. § 1.97(d):
	after the mailing date of either a Final Office Action under 37 C.F.R. § 1.113 or a Notice of Allowance under 37 C.F.R. § 1.311, yet on or before payment of the issue fee.
	1. See the certification below. A fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p).

## VI. CERTIFICATION UNDER 37 C.F.R. § 1.97(e): (check only one box) The undersigned hereby certifies that: A. a each item of information contained in this IDS was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(1)). See further statement under 37 C.F. R. 1.704(d) below in section VII, if applicable; or B. no item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(2)). C. Some of the items of information were first cited in a communication from a foreign patent office. As to this information, the undersigned hereby certifies that each item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby certifies that no item of this remaining information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS. VII. STATEMENT UNDER 37 CFR 1.704(d) The undersigned hereby states that: each item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in 37 C.F.R. 1.56(c) more than thirty days prior to the filing of this IDS. <u>PAYMENT OF FEES</u> (check <u>only</u> one box) A. $\square$ A check in the amount of \$180.00 is enclosed for the above-identified fee. B. Please charge Deposit Account No. 08-0750 in the amount of \$180.00 for the above-indicated fee. A duplicate copy of this paper is attached.

The above references are being cited only in the interest of candor and without any admission that they constitute statutory prior art, contain matter which anticipates the invention, or which would render the same obvious, either singly or in combination, to a person of ordinary

skill in the art. Furthermore, this Information Disclosure Statement shall not be construed as a representation that a search has been made.

If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule (with a petition if necessary) and charge the appropriate fee to Deposit Account No. 08-0750.

Please charge any additional fees or credit any overpayment pursuant to 37 C.F.R. § 1.16 or § 1.17 to Deposit Account No. 08-0750.

Respectfully submitted,

HARNESS, DICKEY, & PIERCE, P.L.C.

By

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P.Ø. Box 8910

Reston, Virginia 20195

(793) 668-8000

JEC:psy

Enclosures:	$\boxtimes$	Form PTO-1449(s)
	$\boxtimes$	Documents
		Foreign Search Report
		Fee
		Other:

#### FORM HDP-1449 (Based on Form PTO-1449)

# PATENT AND TRADEMARK OFFICE RMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Sheet 1 of 2

ATTORNEY DOCKET No.	SERIAL NO.
29250-000999/US	10/788,460
APPLICANT	
Yigal BEJERANO et al.	
FILING DATE	GROUP
March 1, 2004	2661

U.S. PATENT DOCUMENTS						
Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
1.						

FORE	IGN PATEN	T DOCUMENTS					
Ref. Desig.	Examiner's Initials	Document Number	Date	Country	Class/ Subclass	Translation	No
1.							

OTHE	OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)					
Ref. Desig.	Examiner's Initials					
1.		P.S. Henry, and Luo Hui. Wifi: What's next? IEEE Communications Magazine, 40(12):66-72, December 2002.				
2.		Thyagarajan Nandagopal, Tae-Eun Kim, Xia Gao and Vaduvur Bharghavan. Achieving MAC Layer Fairness In Wireless Packet Networks. In Proceedings of the sixth annual international conference on Mobile computing and networking, pages 87-98. ACM Press, 2000.				
3.		A. Kopsel and A. Wolisz. <u>Voice transmission in an IEEE 802.11 WLAN based access</u> <a href="mailto:network">network</a> . In <i>Proceedings of WoWMoM 2001</i> , Volume 1, pages 24-33, Rome, Italy, July 2001.				
4.		Constantine Coutras, Sanjay Gupta and Ness B. Shroff. Scheduling of real-time traffic in IEEE 802.11 wireless LANs. Wireless Networks, 6(6):457-466, 2000.				
5.		M. Veeraraghavan, N. Cocker and T. Moors. <u>Support of voice services in IEEE 802.11</u> <u>wireless LANs</u> . In <i>Proceedings of IEEE INFOCOM'01</i> , Volume 1, pages 488-497, Anchorage, Alaska, April 2001.				
6.		S. Mangold. <u>Coexistence of Overlapping Basic Service Sets</u> . In <i>Proceedings of the Mobile Venue'02</i> , Athens, Greece, May 2002.				
7.		S. Mangold, L. Berlemann and G. Hiertz. <u>QoS Support as Utility for Coexisting Wireless LANs</u> . In <i>Proceedings of the International Workshop on IP Based Cellular Networks</i> , IPCN, Paris, France, May 2002.				

Examiner:	Date Considered:

FORM HDP-1449)

# PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Sheet 2 of 2

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OTHE	OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)				
Ref. Desig.	Examiner's Initials				
8.		Qiang Ni, Lamia Romdhani, Thierry Turletti and Imad AAd. QoS Issues and Enhancements for IEEE 802.11 Wireless LAN. Technical Report RR-461, INRIA, France, November 2002.			
9.		S. Mangold, S. Choi, P. May, O. Klein, G. Hiertz and L. Stibor. <u>IEEE 802.11e Wireless</u> <u>LAN for Quality of Service</u> . In <i>Proceedings of the European Wireless</i> , Volume 1, pages 32-39, Florence, Italy, February 2002.			
10.		Madhav V. Marathe, Heinz Breua, Harry B. Hunt III, S. S. Ravi and Daniel J. Rosenkrantz. Simple Heuristics for Unit Disk Graphs. <i>Networks</i> , 25:59-68, 1995.			
11.		Dan Chalmers and Morris Sloman. A Survey of Quality of Service in Mobile Computing Environments. IEEE Communications Surveys, 2(2), 1999.			
12.		Nitin H. Vaidya, Paramvir Bahl and Seema Gupta. <u>Distributed Fair Scheduling in a Wireless LAN</u> . In <i>Proceedings of the sixth annual international conference on Mobile computing and networking</i> , pages 167-178, ACM Press, 2000.			
13.		J. L. Sobrinho and A.S. Krishnakumar. Real-Time Traffic over the IEEE 802.11 Medium Access Control Layer. Bell Labs Technical Journal, pages 172-187, Autumn 1996.			

Examiner:	Date Considered: